

**PROVIDING ACCESS TO A HIDDEN RESOURCE:
THE NATIONAL MARINE MAMMAL LABORATORY
FUR SEAL ARCHIVE**

Sonja Kromann

National Marine Mammal Laboratory Library
National Oceanographic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center
Seattle, Washington, U.S.A.
(Sonja.Kromann@noaa.gov)

Abstract: NOAA's National Marine Mammal Laboratory (NMML) Library houses an archive documenting the northern fur seal research program that has been ongoing for over a century on the Pribilof Islands in the Bering Sea, as well as including information on commercial and subsistence harvests, and utilization by the Pribilof Island people. The archive includes research materials, photos, correspondence, and documents relating to the research and commercial harvest of northern fur seals on the Pribilof Islands. Archive materials and documents were generated by the various U.S. government agencies responsible for managing northern fur seal populations. Since 1970 this responsibility has been held by the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service. Also included are materials from related organizations such as the International North Pacific Fur Seal Commission (INPFSC). The archive is a repository for current research output and is used locally for historic research, but online access to the public was previously limited to a brief paragraph describing the collection on the NMML Library home page. A web page to provide access to the NMML Fur Seal Archive was developed in 2010. The NMML Fur Seal Archive page now provides access to an extensive finding aid with links to the full-text of some of the major document series and other archive documents, as well as related publications. Moving forward, additional archive materials will be digitized and links to relevant materials and resources on the northern fur seal will be added.

Keywords: marine mammals, fur seals, NOAA, digital archives.

Introduction

NOAA's National Marine Mammal Laboratory (NMML) Fur Seal Archive includes materials focusing on the northern fur seal (*Callorhinus ursinus*) and the research program conducted primarily on the Pribilof Islands in the Bering Sea. This paper provides an overview of the northern fur seal harvest and research that is documented in the Fur Seal Archive before describing the archive history and organization. In the past five years, several digitization projects were completed by the NMML Library and staff. These projects are included and add to the development of the NMML Fur Seal Archive

web page. Looking forward, additional resources will be digitized and linked in the Fur Seal Archive web page on demand and as time allows.



Figure 1. Map of the Pribilof Islands

History of Northern Fur Seal Harvest and Research

The northern fur seal (*Callorhinus ursinus*) was first described in 1741 by German naturalist Georg Wilhelm Steller while he was stranded with Vitus Bering's expedition on Bering Island. Steller published his observations of northern fur seal behavior in 1751 as one of the earliest behavior analyses of any mammal. The migration patterns of the northern fur seal and the economic potential of harvesting the northern fur seal led Russia to actively seek the breeding grounds of the northern fur seal. The breeding grounds were discovered in 1786-87 by Russian navigator Gerassim Pribilof on the two main islands of the archipelago later to bear his name, St. Paul and St. George. Uncontrolled harvest on the Pribilof Islands began shortly thereafter and over 2.5 million pelts were taken over the next few decades. Faced with severe declines in northern fur seal population levels, Russia forbade the killing of females in 1834. Population levels had recovered by the time Alaska was purchased from Russia by the United States and the northern fur seal harvest alone repaid the \$7.2 million purchase price within five years. In the first two years after the transfer to the United States, 200,000 to 300,000 pelts were taken on the Pribilof Islands by various independent sealing companies. In 1869, the U.S. Congress established the Pribilof Islands as a special reservation to protect the northern fur seal on their breeding grounds and provided for a controlled harvest. After that, the U.S. Treasury Dept. awarded two consecutive 20-year leases for sealing. During the first lease, just over 2 million sealskins were harvested, during the second the take was only 342,651. The decrease in harvest levels coincided with the peak of unregulated pelagic sealing that took mostly pregnant females, decimating the Pribilof herd. These declines were documented by Henry W. Elliott in the 1880s, but since Elliott was an artist his

observations were not taken seriously. Pelagic sealing conducted by U.S., Canada, and Japan peaked in 1894 and halted in 1911 as part of an international agreement between the U.S., Great Britain (for Canada), Japan and Russia to regulate and control the harvest of North Pacific fur seals. Beginning in 1910, the harvest was directly supervised and carried out by the U.S. Federal Government, and since 1970 management has been the responsibility of the U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS). Commercial harvest on St. George Island ceased in 1972 after it was set aside as a research reserve and commercial harvest ended completely in 1984, although a limited subsistence harvest continues. Population levels have been declining since the mid-1970s, and current population levels stands at around 30% of the peak of 2.2 million animals observed in the early 1950s. This decline is attributed to a variety of factors including commercial fisheries, environmental factors, entanglement in marine debris, and climate change. Research on the northern fur seal is ongoing and is reported in the Fur Seal Investigations and other publications.

Fur Seal Archive

The Fur Seal Archive is housed in the National Marine Mammal Laboratory (NMML) Library and includes correspondence, reports, data, and images. The archive was first organized by Victor B. Scheffer and others starting around 1940 when he was director of the Marine Mammal Biological Laboratory, NMML's predecessor. A brief finding aid and record structure were developed in 1966, dividing the collection into 9 major subject categories that form the basis of the current archive organization. The categories included in the 1966 finding aid include: History, Agreements, Popular Information; Comprehensive Research (general); Comprehensive Research (plans and reports); Environment; Anatomy-Physiology; Behavior; Mortality and Injurious Influences; Population; and, Utilization. A brief description of the Fur Seal Archive was added to the NMML Library web page in 1999, with a contact link included for people interested in additional information. The finding aid was revised and expanded to include more detail in 2001 and since 2004 there have been several projects that digitized portions of the Fur Seal Archive and additional projects that related to the Pribilof Islands and the northern fur seal. Contributing projects include the creation of the northern fur seal species page in 2005; the compilation of a revised and updated northern fur seal bibliography in 2006; the northern fur seal image archive in 2009; the digitization of the Fur Seal Investigations series in 2009; and, the various reports and documents created by the Pribilof Islands Restoration Project (NOAA, National Ocean Service, Office of Response and Restoration) completed in 2009. In 2010, the Fur Seal Archive finding aid was again updated and the Fur Seal Archive web page created to improve awareness and access to the archive and providing access to digitized content. The Fur Seal Archive web page can be accessed at: <http://www.afsc.noaa.gov/nmml/library/nfs-archive.php>



Figure 2. The Fur Seal Archive webpage

Fur Seal Investigations

The Fur Seal Investigations are a long-running report series that began in the early 1940s and continue to present. Fur Seal Investigations report on research conducted on the northern fur seal by the U.S. Government. A project was undertaken in 2009 to collect existing full-text fur seal reports and digitize the rest as needed. Recent fur seal investigations were available via the Alaska Fisheries Science Center Publications Database and reports from the 1960s were located in the Biodiversity Heritage Library within the Special Scientific Report – Fisheries or SSRF series. The Fur Seal Investigations have included many title variations over the years: annual; bi-annual; pelagic vs. non-pelagic; geographic location covered, etc., and they have been included in many different report series reflecting changing management responsibilities within the U.S. Government. The series is ongoing and is currently produced bi-annually. It is currently included in the NOAA Technical Memorandum NMFS-AFSC report series and the most recent Fur Seal Investigation covers research conducted in 2006-2007. Links to the Fur Seal Investigations are included on the Fur Seal Archive home page at: <http://www.afsc.noaa.gov/nmml/library/nfs-investigations.php> The reports are identifiable by series, title, and year and are also linked within the Fur Seal Archive under Comprehensive Research, Section 3.A where they are filed in the print archive.

Northern Fur Seal Photo Archive

The Fur Seal Archive includes several series of ground-level and aerial photos which document changing population levels on the Pribilof Islands. In a project completed in 2009, these image series were digitized and geo-spatial data was added in a project completed in 2009. The project resulted in a searchable database where images and population levels can be compared. The Northern Fur Seal Photo Archive page available at: <http://access.afsc.noaa.gov/furseal/rookeryimages/> provides access to the database.

The project was described in a report entitled “Northern fur seal rookery photo archive: aerial and ground-level photos, Pribilof Islands, Alaska, 1895-2006”. This report is available online at: <http://www.afsc.noaa.gov/Publications/ProcRpt/PR2009-03.pdf>

Northern Fur Seal Species Page

The northern fur seal species page was first created in 2005 and provides an overview of northern fur seal research conducted by the National Marine Mammal Laboratory as well as information on specific aspects of northern fur seal population biology and a listing of NMML publications on the northern fur seal. The page is linked on the Fur Seal Archive home page and is available at http://www.afsc.noaa.gov/nmml/species/species_nfs.php

Fur Seal Archive Webpage – Phase 2

The next phase of the Fur Seal Archive web page development will include adding links to existing reports and documents listed in the archive and digitization over time of others on demand or as funds allow. Planned additions to the full-text content linked on the Fur Seal Archive web page include 19th and early 20th century government reports by D.S. Jordan, C. H. Townsend, H. W. Elliott and others. Another planned addition, is to link the Pribilof Island Log Books 1870-1961. These logbooks were maintained by U.S. Government island managers and include details of northern fur seal harvest activities and daily life of the Pribilof Islanders. The log books were transferred to the National Archives and Records Administration (NARA) in the 1990s and they have been microfilmed. Limited full-text access is available via the NARA Archival Research Catalog (ARC) at: <http://www.archives.gov/research/arc/> (Search “Pribilof Island Logbooks” or ARC Identifier 297024). Other links planned in Phase 2 are to add publications from the Pribilof Islands Restoration Project and the digitized photos of Victor B. Scheffer and Karl W. Kenyon, both of whom conducted extensive research on the Pribilof Islands during their careers.

Fur Seal Archive Webpage – Future Developments

Moving forward to continue development of the Fur Seal Archive web page, I will be working with the Alaska Fisheries Science Center and/or NMFS Scientific Publications Office to host pre-NOAA online fur seal archive content. Other plans include adding additional online content to archive documents identified in Phase 2, to update and expand the archive web page, adding in relevant citations and links as identified or scanned, to create a collection-level MARC record for the Fur Seal Archive, and adding archive documents to NOAALINC, the NOAA Libraries online catalog and to the Aquatic Commons as needed.

In Conclusion

The creation of the Fur Seal Archive web page has greatly increased access to this collection. It also serves to increase awareness of the history, management, and research conducted by the U.S. Government on the northern fur seal. As additional archive content is linked, the page will also serve to collect and provide centralized access to literature and data on the northern fur seal.

Fur Seal Archive Links

NMML Library Home Page: <http://www.afsc.noaa.gov/nmml/library/>

NMML Library Fur Seal Archive: <http://www.afsc.noaa.gov/nmml/library/nfs-archive.php>

Fur Seal Investigations: <http://www.afsc.noaa.gov/nmml/library/nfs-investigations.php>

Northern Fur Seal Photo Archive Database:

<http://access.afsc.noaa.gov/furseal/rookeryimages/>

Northern Fur Seal Photo Archive Report:

<http://www.afsc.noaa.gov/Publications/ProcRpt/PR2009-03.pdf>

NMML Northern Fur Seal Species Page:

http://www.afsc.noaa.gov/nmml/species/species_nfs.php

Northern Fur Seal Bibliography Database:

<http://access.afsc.noaa.gov/furseal/search.php#top>

Northern Fur Seal Bibliography:

<http://www.afsc.noaa.gov/Publications/ProcRpt/PR%202006-05.pdf>

Additional Resources

NOAALINC (the NOAA Libraries Online Catalog):

<http://www.lib.noaa.gov/uhtbin/webcat>

Alaska Fisheries Science Center (NOAA, NMFS), Publications Division:

<http://www.afsc.noaa.gov/Publications>

NOAA, National Ocean Service, Office of Response and Restoration, Pribilof Islands Environmental Restoration Project Page:

[http://www.response.restoration.noaa.gov/topic_subtopic_entry.php?RECORD_KEY%28entry_subtopic_topic%29=entry_id.subtopic_id.topic_id&entry_id\(entry_subtopic_topic\)=204&subtopic_id\(entry_subtopic_topic\)=12&topic_id\(entry_subtopic_topic\)=2](http://www.response.restoration.noaa.gov/topic_subtopic_entry.php?RECORD_KEY%28entry_subtopic_topic%29=entry_id.subtopic_id.topic_id&entry_id(entry_subtopic_topic)=204&subtopic_id(entry_subtopic_topic)=12&topic_id(entry_subtopic_topic)=2)

Pribilof Islands, Alaska: preserving the legacy [electronic resource] (NOAA Technical Memorandum NOS ORR-17) (2008):

http://docs.lib.noaa.gov/noaa_documents/NOS/ORR/TM_NOS_ORR/TM_NOS-ORR_17/HTML/Seal_Islands.htm

Biodiversity Heritage Library: <http://www.biodiversitylibrary.org/>

National Archives and Records Administration – Archival Research Catalog (ARC):

<http://www.archives.gov/research/arc/>

